WEIYANG

ISO 9001-2000

CONNECT THROUGH US

SF-1000A

Security Smoke Generator User Manual

Thank you for choosing WeiYang security smoke generator. Please read this instruction carefully prior to operation.

Warning!

∗ Hot nozzle! Keep at least 50 cm distance.
∗ The heater of the generator is extremely hot. Please be careful when the front cover is opened.
∗ No user serviceable parts inside. Please contact with an authorized dealer when maintenance is required.
∗ Please disconnect power before change fuse.
∗ Please operate only with adult supervision.
∗ Only WeiYang smoke fluid should be used. Other fluid may damage the equipment or cause dangers to human physical safety.
∗ Do not use without smoke fluid.
∗ For indoor use only. Please keep dry.
∗ Please clear smoke away from room after an ejectment. Otherwise, residue might be caused.

Package

Before starting installation WeiYang security smoke generator, please make sure that you have all the following equipments:

- 1 × WeiYang security smoke generator
- 1 × Smoke fluid bladder
- 1 × Mounting set
- 1 x User Manual

Controlling of Smoke

The three sets of terminal blocks on the PCB of WeiYang smoke generators, Alarm, Trigger, and Hold-off are the keys to generate smoke.
In order for generator to produce smoke in the critical moment, the three sets of connections must be closed circuit at the same time, which can avoid wrong action of making smoke.
For instance, both Alarm and Trigger can be set up as switches on the security system control panel.
On the other hand, Hold-off usually can be connected to a PIR (motion detector)

or a window/door sensor.
However, please note in order to stop making smoke, either Trigger or Alarm has to be released (open circuit).
Only releasing Hold-off cannot stop smoking.

PCB Connection

All relay outputs are offered as volt-free contacts.
The “Alarm” and “Trigger” inputs are also required to be volt-free.

Tamper: When the Tamper connection or its front jumper or the machine front cover or fluid bag chamber cover, any one of above four parts is open circuit, the LED red light will flash every 2 seconds and the buzzer will produce a long beep sound every minute to warn.

12V/100mA This terminal block can offer DC 12V 100mA power output.

Hold off This terminal can work with **Alarm** and **Trigger** together to activate the smoke generator.
When all **Hold**, **Alarm**, and **Trigger**, three terminal blocks are closed circuit, the machine will start to produce smoke. Usually, this terminal can be connected to a PIR (motion detector) or a door/window sensor.
Once the PIR is activated, this connection will be closed circuit.
However, only removing Hold-off (Making it open circuit) cannot stop smoking.

Verification There are three connection points in this terminal block.
They are COM, NO (Normally Open), and NC (Normally Closed) respectively.
When COM and NO are wired to a security control center, the relay will give a signal of closed circuit if the machine is activated.
This signal can notice the security control center that the unit is producing smoke.
Or this connection can be wired to another security smoke machine.
When the unit starts to produce smoke, this terminal will send the closed circuit signal to trigger the other smoke machine.
If COM and NC are wired, the reverse signal (open circuit) will be sent out.

UPS There are three connection points in this terminal block.
They are COM, NO (Normally Open), and NC (Normally Closed) respectively.
When COM and NO are wired to a security control center, the relay will give a signal of closed circuit if the UPS is in use.
This signal can notice the security control center that the UPS is working.
If COM and NC are wired, the reverse signal (open circuit) will be sent out.

Low There are three connection points in this terminal block.
They are COM, NO (Normally Open), and NC (Normally Closed) respectively.
When COM and NO are wired to a security control center, the relay will give a signal of closed circuit if the smoke fluid is low.

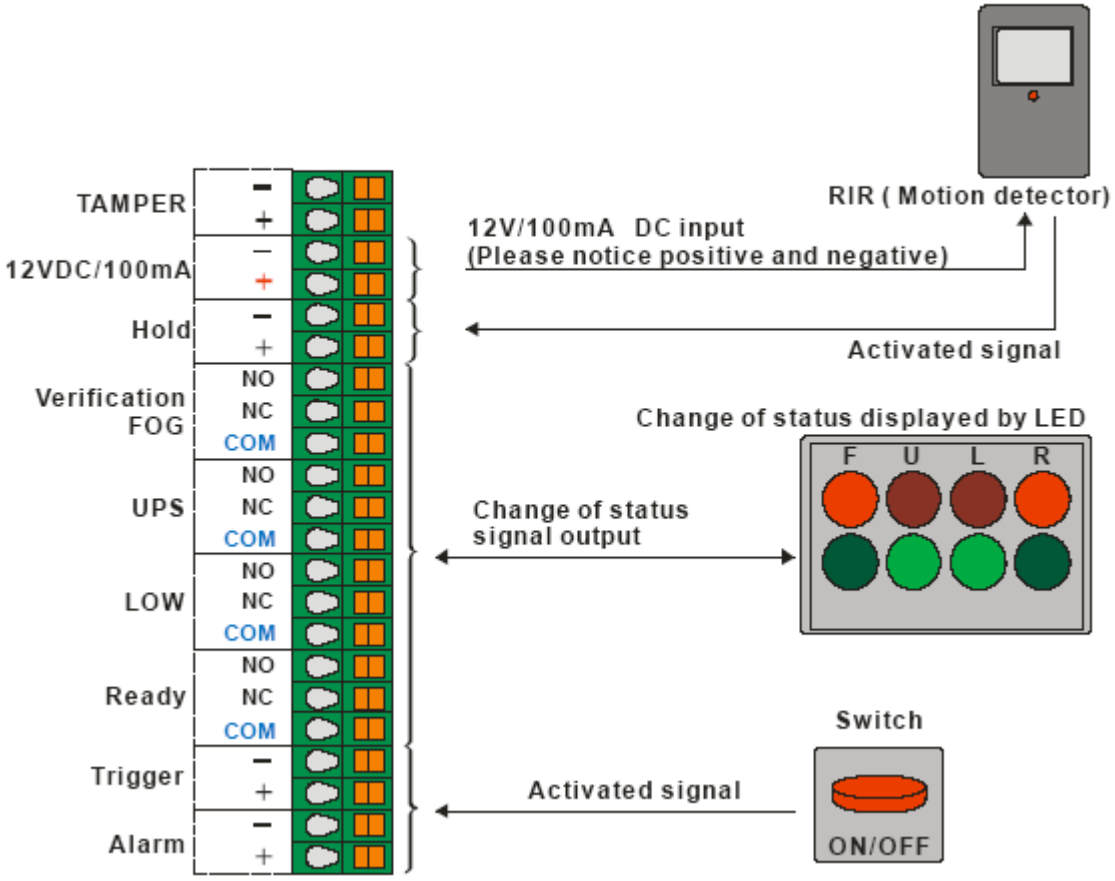
This signal can notice the security control center that the smoke fluid is low.
If COM and NC are wired, the reverse signal (open circuit) will be sent out.

Ready There are three connection points in this terminal block.
They are COM, NO (Normally Open), and NC (Normally Closed) respectively.
When COM and NO are wired to a security control center, the relay will give a signal of closed circuit if the smoke machine completes the heating process.
This signal can notice the security control center that the smoke machine is ready.
If COM and NC are wired, the reverse signal (open circuit) will be sent out.

Trigger This terminal can work with **Alarm** and **Hold** together to activate the smoke generator.
When all **Hold**, **Alarm**, and **Trigger**, three terminal blocks are closed circuit, the machine will start to produce smoke.
Generally, this terminal can be set as a switch. Releasing the switch (Making it open circuit) can stop smoking.

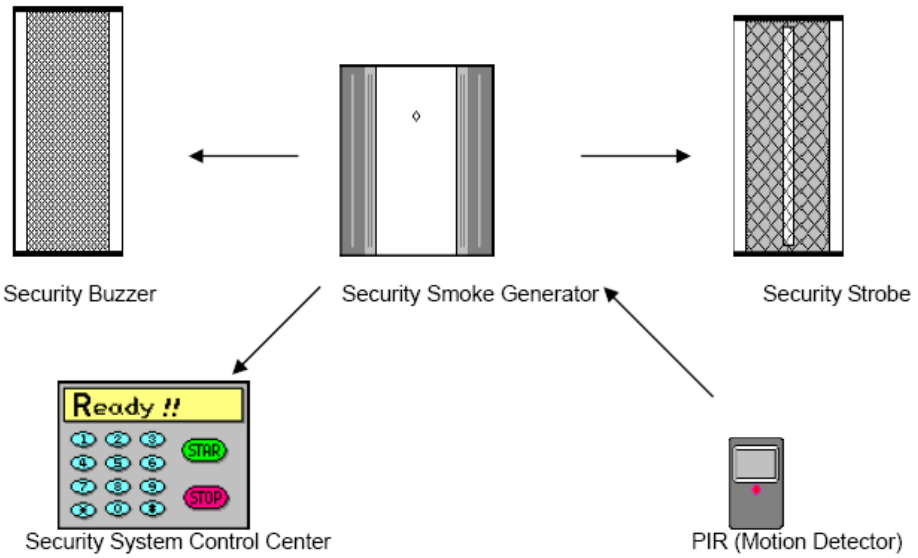
Alarm This terminal can work with **Trigger** and **Hold** together to activate the smoke generator.
When all **Hold**, **Alarm**, and **Trigger**, three terminal blocks are closed circuit, the machine will start to produce smoke.
Generally, this terminal can be set as a switch.
Releasing the switch (Making it open circuit) can stop smoking.

◎ Example for PCB connection



Notice:
When Trigger, Alarm, and Hold are activated at the same time (All are closed circuit),
the generator will start to produce smoke.
In order to stop making smoke, either Trigger or Alarm has to be removed (Open circuit).
Only removing Hold cannot stop smoking.

◎ **Example of application**



Setting the DIP Switches

Open the front cover and locate the DIP switches (There is a block of two).

DIP1 When switch to “ON”, the activation of producing smoke is reverse.
(It means that Alarm, Trigger, Hold-off PIR Alarm have to be open circuit in order to make smoke)

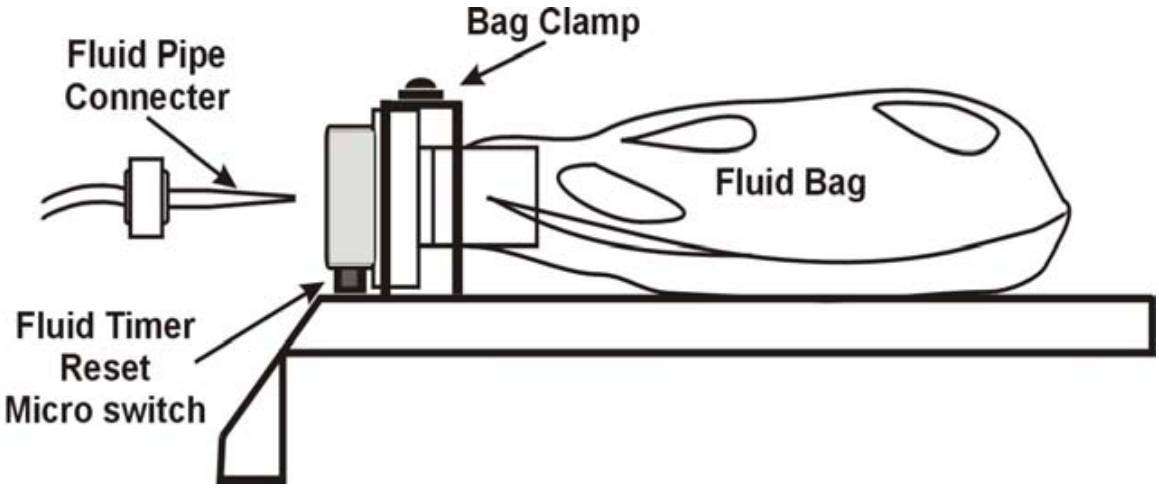
DIP2 In order to change UPS state (Switch UPS ON/OFF) on the security smoke machine, first please switch DIP Switch 2 to ON.
At this moment, the red and green LED flicker.
And then please press PB2 button for 10 seconds.
When setting is completed successfully, the buzzer beeps.
After setting, please switch the DIP Switch 2 to OFF.
Then the whole process is totally finished.

Set Up Duration of Smoke Output

Switch DIP switch No. 2 to “ON”. Press PB1 for 5 seconds.
After twice short beep, every press of PB1 can add 15 seconds.
The duration of smoke can be set between 15 and 360 seconds.
When setting is completed, switch DIP 2 to “OFF”.

Replacement of Smoke Fluid Bladder

Open the front cover, smoke fluid bladder can be changed easily in a few seconds. When processing exchange of smoke fluid bladder please turn on the power of the generator and make sure that micro switch is activated properly (you can hear the click sound) so that timer can be reset and record the working time of smoke fluid bladder correctly.
Loose knob and clamp and take old fluid bladder out first. Insert fluid pipe connector into new fluid bladder cap (out mark).
Finally, put the new bladder back to the generator and screw the knob and clamp tightly.
Meanwhile please confirm if the LED light is on green light normally.
Please always replace a full fluid bladder. Otherwise, it might damage the pump of generator.



LED & Buzzer Status Table

Machine Status	Buzzer	LED
Machine Overheating	1 short beep every 5 sec.	Red flash twice every 2 sec.
Front Cover or Fluid Bag Chamber Cover is Opened	1 long beep every 1 min.	Red flash once every 2 sec.
UPS Power Cut	3 short beeps every 30 sec.	Red flash twice every 5 sec.
AC Power Cut	2 short beeps every 30 sec.	Red flash once every 5 sec.
Heater Fault	1 long beep every 10 sec.	Red flash
Fluid Level Empty	1 long and 1 short beep every 5 min.	Orange flash
Fluid Level Low	1 short beep every 5 min.	Permanent orange
Heating Process incomplete	Long beep for 30 sec. and then 3 short beeps every 5 min.	Permanent red
DIP 2 switch to ON	No buzzer	Red and green flash together
Normal	No buzzer	Permanent green
Armed	No buzzer	Green light flashes slowly

Test the security smoke generator

Once WeiYang security smoke generators reach ready status (Green LED On), you can carry out a simple test at generators to check the smoke production.
Open the front cover, and press and hold down the “PB1“test button. The machine will produce smoke.
Smoke production ceases once the “PB1”test button is released.
Thank you very much again for your patience and reading this manual.
If you have any further question about our products, please do not hesitate to contact your local distributor or WeiYang directly.

WeiYang Technology contact information

Email: sales@weiyang.com.tw Tel: +886-2-2269-3323 Fax:+886-2-2269-3325
No.13, Datung Street, Tucheng Industrial District, Taipei County, Taiwnd R.O.C.